

Total Integrated Procurement System

Current Status

Conceptual Vision

An on-line system for the requisitioning, placement, vendor management, and administration of procurement activities.

The total integrated procurement system will be a client server system which will support the entire procurement process from preparation of the purchase request to close-out of the contract or purchase order.

TIPS Project

- Includes all activities to evolve into an paperless procurement environment
- Builds on and facilitates process improvements
- Incorporates on-going systems initiatives
- Anchored by AMS “Procurement Desktop”

We are going to impose program management discipline to the project. First, we will flesh out our requirements as identified by the TIPS focus teams.

We will then identify potential process improvements and encourage mini-CQI teams to investigate and institute improvements while TIPS is in design. It is not our intent to “pave the cow paths”.

TIPS includes all the electronic commerce initiatives related to procurement. This includes electronic invoice approval, WEB based JIT catalog search and purchase card reconciliation.

However, it is anchored by Procurement Desktop. This is a very flexible client server application developed by American Management Systems.

Requirements Definition

- Scoping meeting in May 95
 - » Established baseline and potential strategies
- Focus teams defined goals in Mar 96
- Basis for Request for Information

BUS Division held a facilitated meeting in May of 1995 which resulted in a vision of what an on-line system could do to support our buyers and customers.

Based on that vision, focus teams looked at various identified top level requirements which were used to set forth the basis for a request for information sent out to approximately 60 firms nation-wide.

Technical Goals

- Compatible with Windows, MAC, UNIX
- ANSI X.12 protocol
- Client/Server
- Graphical User Interface with intuitive icons
- Custom integration with legacy systems
- Object Linking and Embedding (OLE) for word processors and spreadsheets

These are some of the technical goals we identified. Probably the most important and most difficult is the first.

Very few client server systems will effectively operate on both Windows and MAC platforms. None will operate on all three. AMS currently has the capability to operate on Windows and MAC. We have a WEB based strategy to operate on UNIX platforms at the front end.

Functional Goals

- Paperless
- *On-line PR*
- *Document tracking*
- Purchase order processing
- Electronic Commerce
- FIN/Property/Transportation interface
- Common “feel” to all subsystems
- Bar code receiving
- *Workload mgt*
- Automated forms
- *Vendor mgt*
- Expert tools
- *Management reports*

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These are some of the functional requirements identified by the TIPS focus teams. Basically, our electronic purchasing system will have the capability to handle all procurement activities from the generation of the purchase request by the requester to close-out and archiving of the file.

Our ultimate goal is not to have to generate any paper during most procurements. Obviously, it may be some years before we can get away from written subcontracts, BUT we want to make sure that we have the enabling technology in place.

We believe that the process of generating a PR, developing a request for proposal, and evaluating proposals, can all be done on line in the short term.

I have charts on the italicized items.

On-Line Purchase Request

- Includes edit checks and on-line help
- Cut, copy and paste from word processor
- Expert tools for statement of work and sole source
- Validate accounting information
- Electronic review, approval and transmission

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The purchase request will be completely electronic. The requester will prepare an on-line form with extensive help functions to ensure they know what information they need to provide.

If they need to prepare attachments such as statements of work or sole source memos they will be able to use MS Word to prepare the document and attach it to the Purchase Request.

We intend to provide expert tools such as those developed by DOE Albuquerque.

The PR will be routed for approval within the requester's organization and validated against Lab systems such as our financial and signature authority systems.

Then the PR package will be electronically transmitted to procurement for assignment and action.

Document Tracking

- Requester, buyer and management have continual status
 - » PR receipt
 - » Status of order
 - » Award of order
 - » Receipt at Lab
 - » Delivery to drop point
- Ability to prioritize as needed

Everyone involved in the process will be able to determine the status of the request.

Workload Management

- Procurement managers know buyer workload and order status
- Electronically assign PRs
- Track activity and administrative lead times
- Work problems on real-time basis

When the team leader receives a PR, they will be able to review buyer work load before assigning the PR. The requester will have the assignment information and will be able to track order status along with management and buyers.

Vendor Management

- Vendor profile information
- Track quality and schedule performance
- Check debarred bidders list
- Provide solicitation list

Buyers will have on-line access to the vendor data base.
Vendor performance information will also be available.
Buyers will be able to use this information in developing their
source list.

Management Reports (Data Warehouse)

- Workload data
- Purchase request query
- Performance metrics
- Socio-economic metrics
- Quality metrics

We intend to use the Data Warehouse as the principal means of providing purchase request status to our customers. Other information such as performance and quality metrics may only be available to procurement managers thru TIPS Procurement desktop.

In-House Projects

- GUI search capability for JIT catalog
- Electronic invoice approval
- GUI purchase card reconciliation

We are already rolling out some on-line systems which are being managed under the TIPS umbrella.

The GUI search capability is a WEB based search engine which is being tested this month and scheduled for full implementation in January 1997..

Requesters will be able to search the JIT catalogs using key words and then click to the current ordering screens to order the items.

The electronic invoice approval is being tested beginning this month. It involves sending an image of the invoice and an approval form over our E-Mail system.

The purchase card reconciliation was implemented in Aug 96. This system not only allows purchase card holders to approve the statement of account, it validates the accounting information and routes the SOA to the approving official.

Award to AMS

- Met all requirements
- Very flexible, intuitive product
- Extensive/knowledgeable support staff
- Developed in Powerbuilder
- Allow use of AMS software objects for other applications
- Rave reviews from U.S. Patent Office and Batelle

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We awarded the contract to American Management Systems. They meet all our requirements and have a very flexible and intuitive product called Procurement Desktop.

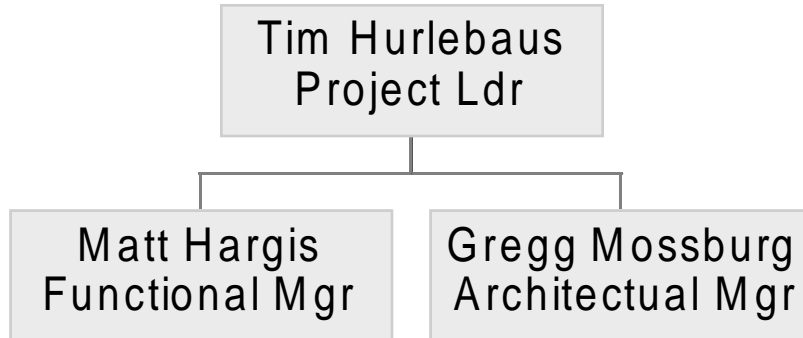
In addition they have the staff to work with us in insuring that the system meets all our functional needs and will work in our hardware and software environment.

It was important to our technical staff that AMS develops their systems in PowerBuilder. This is the same tool that we are using to develop our client server applications such as the data warehouse.

Of even more importance is that AMS gives us the right to use the Procurement Desktop objects in our other applications. In other words we could decide to use their vendor data base in our accounts payable applications.

Finally, we visited the US Patent Office and Battelle at PNL. AMS comes highly recommended.

AMS Project Team



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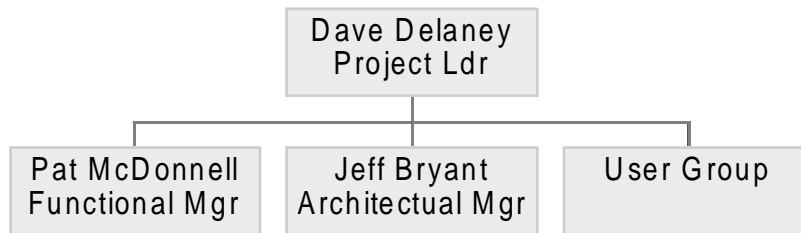
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This is the team which will be our principal points of contact. Matt Hargis will be here almost full time over the next few months. His principal focus will be on adopting the AMS product, Procurement Desktop to our environment here at LANL.

Gregg will concentrate on ensuring that Procurement Desktop will work in our hardware and software environment.

LANL Project Team



This is LANL team.

The user group will be heavily involved in the planning and implementation of TIPS.

User Group

Ray Catanach--Maintenance and Repairs
Moe Zamora--Accelerator Production of Tritium
Dave Barsness--ADP and Electrical
Dolores Trujillo--Construction
Anya Gonzales--Services and Consultants
Keith Palleson--Major Subcontracts
Barbara Martinez--Express Purchase Orders
Nancy Arendt--Customer Service

We have representatives from all our core teams as well as a field representative and our team leader from customer service.

The user group will have input into all the major decisions about TIPS implementation.

Thirty Day Horizon

- Hold two Joint Application Designs in November
 - » Set requirements baseline
- Requirements analysis to draft functional map
- Draft system architecture
- Draft Implementation Plan

We will hold two JAD to document the entire procurement process. We will make sure that we capture all the information that the TIPS focus teams provided last spring. We will then fill in any gaps and identify the potential conflicts between the various teams. After the JAD, Matt will compare the TIPS requirements with Procurement Desktop, and identify outstanding issues. We will then jointly explore solutions.

In addition we will draft an implementation plan which identifies all key actions and due dates.

We will set up Procurement Desktop in a Laboratory environment so we can begin to experiment with formats and solutions.

Joint Application Development

- Define procurement process
 - » Build on Tips Focus Teams
 - » Participation of Focus Group
- Provides basis of functional mapping document
 - » Define differences between PD and TIPS
 - » Identify issues, alternatives, priorities

Implementation Plan

- Hardware and software requirements
- Production roll out strategy
- Software distribution methodology
- Conversion strategy
- Documentation strategy
- Training strategy
- Project schedule
- Incorporate all TIPS related activities

The implementation plan will be our scheduling and tasking tool. It will incorporate all TIPS related activities including those which do not involve Procurement Desktop.

Development Principles

- Customer Involvement
- Take work out of the system
- Utilize prototypes
- Short-term deliverables
- Buy before build
- Common feel to all on-line forms
- Deliver information

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These have been our development principles since we first organized our TIPS focus teams one year ago.

We have involved requesters, and buyers throughout.

Rather than just automate our current processes, we are committed to take work out of the process wherever possible

We are going to take an incremental approach by using a development lab and limited functionality pilots to test before implementation.

Also we will provide immediate Wins for the customers in the form such tools as JIT search and invoice approval.

Historically, LANL has preferred to build their own systems from scratch. In this case we are buying the major portion of TIPS and we planning to use minimize customization of the AMS product.

Whatever we do, we want to have an intuitive product with a common look and feel. This will greatly simplify our training tasks.

Finally, the product is going to gather the metrics we need and deliver needed information to our managers and customers.

Summary

- Aggressive plan to implement electronic commerce
- Significant commitment of LANL resources
- Open development process
- Procurement Desktop will be unifying software

Backup Charts

Requirements Analysis

- Facilitated meetings (JAD)
- Compare TIPS requirements to PD
- Map differences
- Define alternatives/Set priorities
- Decisions made by Change Management Review Board
- Schedule TIPS releases

We will perform a requirements analysis based on the information from the JAD. The analysis will compare TIPS requirements to the current functionality of Procurement Desktop.

By mapping the differences we will be able to decide whether we need to modify our procurement processes to meet the current PD functionality or whether we want to explore changes to Procurement Desktop.

This “Functional Mapping Document” will be our key management tool. Changes will need to be approved by a Change Management Review Board.

Electronic Commerce

- RFPs, proposals and awards can be done electronically
 - » EDI
 - » FAX
 - » EFI
- Speeds up award process
- Driven by capabilities of our vendor base

Bar Code Receiving

- Bar codes accompany orders and are used on shipping labels
- Allow for rapid receiving and tracking
- Allow for remote receiving
- Quick Pay upon receipt

Contractor Selection

- Request for Information
 - » Issued--17 Apr 96
 - » Responses received --7 May 96
- Responses Assessed--May 96
- Site Visits by Jun/Jul/Aug 96
- AMS Demo 23 Jul 96
- Federal Supply Schedule Award--Sep 96

Contractor Selection

- Three viable responses
 - » American Management Systems
 - » Procurement Automation Institute (PAI)
 - » Oracle

Award to AMS

- Oracle
 - » Required use of Oracle RDBMS
 - » More of a supply purchase system
 - » Lukewarm recommendations
- PAI
 - » More of a Federal purchasing system
 - » Would require substantial modification
 - » Small support staff

Project Drivers

- Resource pressure
- Laboratory feedback
- Its good business!